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Personal Digital Information Archiving and Organizing Practices of Engineering and Information Technology Students

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Abstract

Purpose

The study aimed to examine the attitude of students towards organizing and safekeeping their digital documents. It also investigated students' personal digital information archiving and organizing practices from engineering and information technology disciplines.

Design / Methodology / Approach

The design of the study was quantitative and the survey method was used to achieve the objectives of the study. The survey instrument was the questionnaire and distributed to students of the Institute of Engineering and Technology and Punjab University College of Information Technology of the University of the Punjab personally and with the help of information professionals. The questionnaire was distributed to 225 students of both institutes and 202 questionnaires were received back with a response rate of 90 %.

Findings

The results of the study showed that the majority of the students considered that it is important to take care of their digital documents. The majority of the students also made effort to organize their digital data on their personal computer through folder organization. Most of the students accessed their digitally stored data according to their future needs. Most of the students mentioned that they transferred only their most important documents from one device to another. The majority of the students saved their data on personal computers to find them again. Many respondents used some tools i.e. Dropbox to save their data. Many students

did not keep online information; however, they accessed it through the Internet according to their need particularly information related to entertainment. Findings of the study regarding respondents' organizing strategies show that the majority of the students organized their digital data into folders.

Value

Previous researchers investigated students PIM practices generally and sometimes focusing on specific PIM activities – keeping, organizing, and re-finding both paper-based and digital information. However, no study examined engineering and information technology students' personal digital information archiving and organizing practices.

Practical Implications

The study concludes that engineering and information technology students were employing a variety of methods for keeping their digital data safe. This finding implies that students did not have one place for keeping all digital information. Rather, their information items were being managed across different tools and locations. Most of the students were using personal information management tools i.e. Dropbox to save their data. However, the majority of the students were still not using PIM tools. It implies that there is a need to conduct workshops by librarians related to the PIM management systems and tools for effective digital information keeping, organizing, and finding.

Keywords

Digital Information Archiving, Personal Information Management, University of the Punjab, Engineering, and Technology, Information Technology

Introduction

Persons interact with information daily to accomplish tasks and satisfy their needs. People read newspapers to get daily updates, weather forecasts, and get in touch with email messages. Students particularly deal with the bulk of information related to their academic, health, and entertainment needs on daily basis. They obtain information from libraries, classrooms, the Internet, teachers, and friends. Personal information management (PIM) is an area that is rapidly growing in importance and complexity. Burrows (2006) represented the current status of complexities and overloaded data in PIM. He stated that in the world of digitization, almost every task was performed by the computer and some other electronic

devices. Due to the proliferation of information and technological innovation, the personal information sphere of individuals increases, and there arises a need to manage personal information whether in print or electronic form to find it again.

Jones (2005) defined "Personal Information Management refers to people both the practices and the study of the activities to acquire, organize, maintain and retrieve information for everyday use." Boardman indicates that many definitions of PIM draw from a traditional information management perspective - that information is stored so that it can be retrieved at a later date" (2004, p.13). Jones and Teevan (2008) classified PIM activities into three activities namely keeping activities, finding or finding activities, and meta-level activities.

Various researchers also investigated students, researchers, and academics' personal information management behavior focusing on specific activities of PIM. Pikas (2007) in an exploratory study investigated senior engineers' personal and work-related information management practices. Specifically, the study investigated how engineers with more than ten years of post-graduate experience and who work in an applied research and development laboratory setting find, keep, use, organize, re-find, and share their research-related data, literature, working materials, reference materials, and electronic files.

Otopah and Dadzei (2013) investigated the personal information management practices of university students and their implications for library services at the University of Ghana. The researchers focused on the major areas of PIM named as keeping, organizing, finding, and re-finding. Capra (2009) surveyed the North Carolina University community's management practices of personal information. They were also asked about the transfer of digital information among devices. Alman, Frey, Kears, and Tomer (2014) surveyed teaching faculty members to examine their digital work-related information. Similarly, Diekema and

Oslen (2011) conducted an exploratory qualitative study to explore PIM practices among school teachers.

Studies were conducted to investigate practitioner engineers, students, and academics' personal information management practices. However, there appears a lack of studies that investigated particularly engineering and information technology students' personal digital information keeping and organizing practices. The focus of this study is to examine students' attitudes towards organizing and safekeeping of digital information as well as their digital archiving and organizing practices from engineering and technology fields at the University of the Punjab.

Literature Review

Researchers around the world took a keen interest in the area of PIM and explored individuals' best practices. Lansdale (1988) stated the importance of keeping personal information that "the primary reason (there may be others) for keeping this information is to be able to retrieve and use it in the future". Oh and Belkin (2011) in a review study analyzed the personal information keeping behavior in different forms in the USA. The review of the literature revealed that the reasons for keeping personal information are to re-use or re-find information in the future, to remind of tasks, to record the memories, and share with others. The researchers also found that forms of personal information influenced the behavior of keeping. The main problem of keeping personal information irrespective of form is determining the future value of information.

Sinn, Kim, and Syn (2017) conducted an online survey in the USA to investigate the individuals' digital archiving strategies, factors affecting personal digital archiving and challenges faced. About 392 participants completed the questionnaire. The findings revealed that technology factor, personal history factor, and memory factor seem to affect the digital archiving practices of individuals.

Jones, Dumais, and Bruce (2002) in an observational study investigated the methods people use in their work to organize web information for re-use. Participants were drawn from three groups like researchers, information professionals (including librarians), and managers. Data were collected through interviews and questionnaires. The findings of the study revealed that people used a variety of methods – printing web pages, saving web pages to a hard drive, pasting the address for a web page to a document. Findings revealed that people may differ in their keeping practices according to their job positions.

Krtalic, Marceic, and Micunovic (2016) directed a survey in four different Croatian universities and 227 questionnaires were completed online. This study aimed to identify the archiving practices among the students of humanities and social science. Findings revealed that students were conscious of their digital information organizing and securing. The majority of students usually made a simple plan regarding their PIM activities and manage their documents in folders. Their management strategies are based on the importance of documents and type of information, while few students managed their data by specific organizing tools such as Evernote, Calibre, Dropbox, etc.

The research studies showed that people have different personal information organizing (PIO) behavior. The methods they adopted for organizing the personal information varied according to the need for information. Civan, Jones, Klasnja, and Bruce (2008) carried out an exploratory study at the University of Washington. Participants were four female and six male students in health-related and information related fields of undergraduates and graduate level. The results of the study showed there were differences between the two methods of organizing personal information. Tags and folders were used in different scenarios. Folders were the primary method for personal information regarded as workplace and personal. Folders were also “one to many mind mapping’’ (one folder can

contain many documents) and another method of organizing is tags that are the short keys for reminders.

Bergman, Whittaker, Sanderson, Nachmais, and Ramamoorthy (2010) conducted a study at the University of Sheffield which empirically investigated the folders structure, navigation success, and efficiency, effect of folders structure and retrieval from the 296 participants who were everyday computer users. Findings showed that in the organization of information for successful retrieval, people surf their time to make systematic structures of folders, etc.

Chaudhry and Al-Mahmud (2014) investigated the personal information behavior of Kuwaiti engineers. Data was collected through an online questionnaire and interview from selected participants. Findings indicated that engineers collected information from various sources and saved selected information for future use in folders. The use of PIM tools was less among engineers. They took a strong decision regarding information for future needs. They saved information in a structured way and did not use PIM tools. Some participants expressed the need for training sessions for the management of personal information in a productive way.

Saleem (2015) conducted a study aimed to investigate personal information and knowledge management practices of Life Sciences researchers at University of the Punjab. Quantitative data collected through a questionnaire and it covered five areas of PIKM - 1) gathering and searching; 2) organizing, keeping, and securing; 3) selecting and evaluating; 4) spreading and sharing; 5) creating, analyzing, and presenting. Findings showed that researchers were organizing their collections for future use. The researchers were not keeping information only in electronic form, they cared about keeping copies in print form as well. Respondents perceived their skills related to searching, finding, evaluating, and selecting as

good enough and no difference was found in practices of PIKM between the researchers based on gender.

Ameen (2016) studied the PIM behavior of social science students at University of the Punjab. The quantitative data was collected from 221 master students through the questionnaire. The findings showed that students usually saved data on their digital devices, self-created documents like MS Word or Excel, URL, and hyperlinks of any websites. The E-mail was found commonly used medium for sharing information with friends and class fellows. Findings also exhibited that students need training regarding their information management.

A review of studies shows that researchers conducted studies to assess students, researchers' PIM activities related to keeping, organizing, and finding digital information. Factors affecting personal information management practices were also explored. However, very few studies conducted an in-depth analysis of personal archiving and organizing activities. There appears a need for a study to investigate engineers and information technology students' personal digital information keeping and organizing activities.

Research Questions

The research questions of the study are as follows:

- What are the attitudes of students towards organizing and safekeeping digital documents that they create in everyday life?
- What are the personal digital information keeping practices of engineering and information technology students?
- How do students organize and preserve digital data and documents?

Methodology

The design of the study was quantitative and a survey method was used to achieve the objectives of the study. The population of this study was the students of the University of the

Punjab (PU). The University of the Punjab has 13 faculties and 73 departments, institutes, and colleges. The total number of students in PU was 42,863 and the targeted population of the study comprises students of two faculties of PU – Punjab University College of Information Technology (PUCIT) and faculty of Engineering and Technology. Punjab University College of Information Technology (PUCIT old campus) had 5000 students and the population of the faculty of Engineering and technology comprised Institute of Chemical Engineering and Technology (ICET) and Institute of Electrical Engineering was 2206.

The discipline of Engineering and Technology comprises- Institute of Chemical Engineering, Institute of Electrical Engineering, and Department of Polymer Engineering. There are two departments in Punjab University College of Information Technology - Software Engineering and Information Technology. Under these two faculties, there are BS (4years) sessions 2013-17, 2014-18, 2015-19 and 2016-2020, M.Sc. sessions 2015-17, 2016-18, 2017-19 and M.Phil. Sessions 2014-15. Graduate and undergraduate students of four departments of Engineering and one dept of PUCIT were selected for sampling. There were 225 students selected conveniently from selected departments. It was not possible to cover all the departments of Engineering and Information Technology due to the deficit of human resources and time.

The survey instrument of the study was adopted questionnaire for data collection and it was developed by Krtalic, Marcetic, and Micunovic (2016). The permission was taken by Maja Krtalic to use her questionnaire for research purposes. The original questionnaire was in the Croatian language; therefore it was translated into English by using Google translator. It was translated into American English language for better understanding. It was pre-tested in a local setting and respondents were satisfied with the content of the questionnaire.

The researcher personally visited PUCIT old campus and Institute of Engineering and Technology and distributed questionnaires to the participants. The researcher was available during data collection to guide the students. The respondents were also asked the completion of the questionnaire. Librarians were helpful for the data collection process. Due to summer vacation, the research faced difficulty during the data collection process. The questionnaire was distributed to 225 students and 202 students responded with a response rate of 90 %.

Results of Data Analysis

This section describes respondents' demographic information, their personal digital information keeping, and organizing practices.

Respondents' Gender

Figure 1 indicates that an overwhelming majority of the respondents were male 145 (73 %) as compared to female 55 (27 %).

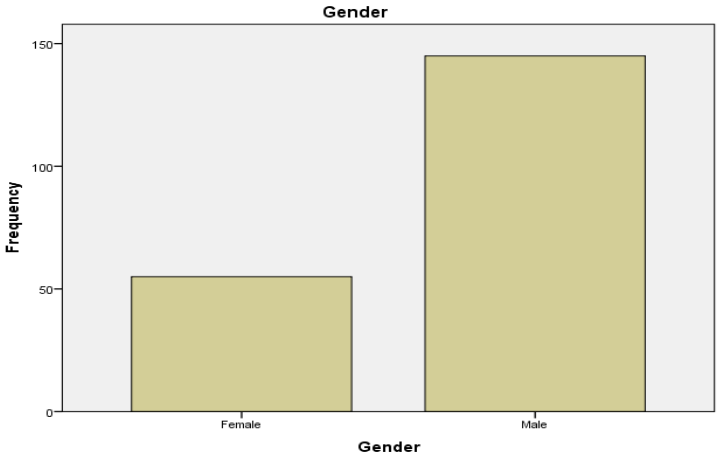

Figure 1 Bar Chart of Respondents' Gender

Respondents' Department

Results of the data analysis indicate that respondents were from different departments of engineering and information technology disciplines. Table 1 shows that most of the respondents 88 (44%) were from the department of chemical engineering, while about 55 (26%) respondents were from the Punjab University College of Information Technology

(PUCIT). Nearly an equal percentage of the respondents 31 (15%) were from the departments of electrical engineering and polymer engineering. An overwhelming majority of respondents from the engineering discipline participated in the study as compared to information technology.

Table 1
Departments Name

Departments	Frequency	Percentage
Chemical Engineering	88	44%
PUCIT	55	26%
Electrical Engineering	31	15%
Polymer Engineering	30	15%
Total	201	100%
Missing Value	1	

Respondents' Program of study

Table 2 indicates that an overwhelming majority of the respondents 167 (83%) were undergraduates studying in the BS program (4 years). Followed by undergraduates, about 21 (11%) respondents of M.Phil. program participated in the study. However, the least number of respondents were graduate 11 (6 %) of the M.Sc. program

Table 2
Program of Study

Program of the study	Frequency	Percentage
BS(4 years)	167	83%
M.Sc.	11	6%
M.Phil.	21	11%
Total	199	(100%)

Migration and Data Management

Dealing with Digital Data. Respondents were asked about the perceived importance of taking care of personal digital data. An overwhelming majority of the respondents 136 (75%) were either agreed or strongly agreed regarding the importance of taking care of their personal digital data. However, about 22 (13%) respondents were either disagreed or strongly disagreed regarding the importance of keeping digital data. The majority of the respondents 122 (70%) were either agreed or strongly agreed regarding organizing their digital content on their computers and about 21 (12%) respondents were either disagreed or strongly disagreed respectively.

Table 3
Respondent behavior regarding digital data

Digital Data	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree	Total	Mean	SD
I consider it important to take care of digital documents that own	5 (3%)	18 (10%)	22 (12%)	62 (34%)	74 (41%)	181 (100%)	4.01	1.088
I try to organize digital content that I store on my computers (e.g. by organizing by folder, assigning data to Author, separating an official from unofficial documents, etc.)	8 (5%)	13 (7%)	31 (18%)	70 (40%)	52 (30%)	174 (100%)	3.83	1.081

Scale Strongly disagree=1, Disagree=2, Neutral=3, Agree=4, strongly agree=5

Digital data access management. Respondents were asked about their personal digital stored data accessing habits. Table 4 shows that most of the respondents 80 (40%) accessed digital stored data only when they needed it. One-third of the respondents 62 (31%) periodically checked their important data and almost 43 (21%) respondents regularly checked the important data. Some respondents 17 (8%) regularly checked all the stored data whether it was important or not and only 2 (1%) respondents mentioned that they did something else.

Table 4

Digital data access management

Checking habits	Frequency (%)
The data that I have stored can only be accessed when I need it.	80 (40%)
I periodically check the information I find important	62 (31%)
I regularly check the data what I consider Important	43 (21%)
I regularly check all the data once saved	17 (8%)

Digital data transfer. Table 5 shows the respondents' practices of data transfer from one device to another. Most of the respondents 80 (40 %) mentioned that they transferred only the most important digital documents. Many respondents 56 (28%) also attempted to transfer their digital data from older to a new medium. An equal number of the respondents 30 (15 %) mentioned that sometimes they transfer data without any special selection and (15 %) respondents indicated that it was not important to transfer the data from older to a new medium. Only a few 5 (2%) respondents did not found relevancy in the above statements and they did something else.

Table 5

Respondents' Practices of Digital Data Transfer

Digital Data Transfer Practices	Frequency (%)
Yes, but only the ones that I think are the most important	81 (40%)
Yes, I try to move all the content from the older media to the newer	56 (28%)
Sometimes, but without any special selection	30 (15%)
No, I do not think that's necessary	30 (15%)
Something else. What?	5 (2%)

Respondents' Digital Information Keeping Practices

Table 6 presents the respondents' practices of keeping digital information to find them again when needed. The majority of the respondents 114 (57%) saved their data on a

personal computer. Many respondents 52 (26%) used online tools to save their data. Results from Table 6 shows that 45 (22%) respondents saved their data on multiple devices and also made a couple of copies. Some respondents 30 (15 %) stored their data through attachment or uniform resource locator (URL) to their email address. Several respondents 26 (13%) saved their data in their personal computer and used any drive or CD to store information. Some respondents 22 (11%) made a separate file in MS Office for information keeping. Few respondents 16 (8%) made a physical print copy. The majority of the respondents saved their digital data on their personal computers than all other methods of storing personal data. Followed by personal computers, respondents also made use of some tools i.e. Dropbox to store their personal data.

Table 6

Digital Information Storing Practices

Information Storing Practices	Frequency (%)
I save them on the personal computer	114 (57%)
I transfer to some tools (like dropbox)	52 (26%)
I make a couple of copies that I keep on different physical devices e.g. external disk, a second computer, etc.)	45 (22%)
I create a bookmark(bookmark or pin) in the browser I use	33 (16%)
I send an attachment or URL address via email	30 (15%)
Save the URL to a special file on your computer	29 (14%)
I save them to another storage medium (CD, DVD, Blue-ray)	26 (13%)
I save the whole web pages to my personal computer	26 (13%)
I create a special document (e.g. word) in which I copy only the most important data	22 (11%)
I print a physical copy	16 (8%)
Something else. What?	7 (3%)

Respondents' Online Information Keeping Practices

Respondents were also asked about their keeping practices of personal information (fun content downloaded from the Internet). Many respondents 50 (25%) did not keep online information; however, they accessed it through Internet according to their needs. About 41 (20%) respondents created bookmarks for future need of information. The results of data analysis showed that respondents were using a variety of online personal information keeping practices and about 36 (18%) respondents saved URLs in a special file on their personal computer.

Almost 33 (16%) respondents saved their data in storage media like USB, CD, etc. Table 7 also indicates that about 30 (15 %) respondents used Dropbox for storing information from the Internet. Some respondents 26 (13%) did not download fun content from the internet and the same number of the respondents 26 (13%) had followed some other practices, but these activities were not mentioned. Few respondents 24 (12%) sent uniform resource locator (URL) via email.

Table 7
Storing information from the Internet

Storing Behavior	Frequency (%)
I do not store it, but I access it as needed	50 (25%)
I create a bookmark(or pin) in the browser I use	41 (20%)
Save the URL to a special file on your computer	36 (18%)
I save them to another storage medium (CD, DVD, Blue-ray)	33 (16%)
I transfer to a "cloud services" (like Dropbox)	30 (15 %)
I do not use fun content downloaded from the internet	26 (13%)
I send an attachment or URL address via email	24 (13%)
Something else. What?	26 (13%)

Digital information backup practices. Table 9 shows respondents' practices of keeping digital data at multiple places for future needs. Most 77 (38%) of the respondents had the only backup of their official documents such as certificates and diplomas, etc. Many respondents 56 (28%) backed up all their documents such as official and unofficial. About 41 (20%) respondents backed up their all data, while 40 (20%) respondents just backed up their personal pictures and videos. Some respondents 35 (17%) backed up their email.

Table 9

Back up practices

Back up Practices	Frequency (%)
I only backup official documents (e.g. Certificates, diplomas, etc.)	77 (38%)
I back up all my personal documents (Personal text, photos, etc.)	56 (28%)
I only backup my personal photos and videos	40 (20%)
I back up all the data (multiple Copies of documents) that I create.	41 (20%)
I backup emails	35 (17%)
No, I do not need that	25 (12%)
Sometimes I make copies, but no special selection	21 (10%)

Storage formats

Table 8 presents the respondents' choice of the storage format of documents. Most of the participants 91 (45%) considered that they choose the best-known format for a particular type of document. Above one-third 70 (35%) of the respondents relied on the long-term availability of the document format. About 63 (31%) respondents preferred the format that was automatically offered for a certain type of document.

Table 8

Storage Format choice

Format	Yes	No
I choose a format that is best known to me for a particular type of document	91 (45%)	109 (56%)
I choose the format I know that will allow the long-term availability of the document.	70 (35%)	130 (65%)
I choose a format that is automatically offered for a certain type of document.	63 (31%)	137 (69%)

Digital Information Organizing Practices

Respondents were also asked about their personal information organizing practices. Table 10 revealed the organizing practices of respondents and it shows that the majority of the respondents 138 (68%) organized their data into the folders. About 40 (20%) respondents organized data by separating the formal and informal documents. Some respondents 34 (17%) organized data by tagging documents with keywords like the author, title and date, etc. Few respondents 19 (9%) used tools for information organizing. Only 3 (1%) respondents mentioned that they did something else.

Table 10

General organizing practices

Organizing practices	Frequency
Organizing by folders	138 (68%)
By separating the official from unofficial documents	40 (20%)
By tagging documents with data (like title, author, date, etc.)	34 (17%)
I use some tools (Evernote, Dropbox, caliber Etc.)	19 (9%)
Something else. What?	3 (1%)

Organizing in folders. The respondents who answered 'Yes' for the first statement of Table 11, “Organizing by folders” were further asked to answer the statements given in Table

11. Data analysis of different methods for organizing documents by folders indicates that most of the respondents 93 (46%) organized their folders by the relevancy of content. The second major way for organizing folders 74 (37 %) was according to the type of the document like image, text formats (HTML, PDF, etc.). Several respondents 40 (20%) organized their folders by date. Only a few students 11 (5%) were interested in organizing folders by numbers. About 9 (4%) respondents used another strategy but they did not mention those strategies.

Table 11
Organizing in folders

Organizing method	Frequency
By relevant of content (study document, official documents, information for entertainment, etc.)	93 (46%)
By the type of document (e.g. image, text, video)	74 (37%)
Organized by date	40 (20%)
Numerically	11 (5%)
Something else. What?	9 (4%)

Personal information management (PIM) tools

Table 12 presents the results of open-ended questions. In an open-ended statement, respondents were asked to specify tools of personal information management (e.g. Evernote, Calibre and Dropbox, etc.) they used for organizing personal data. The content analysis of responses shows that majority of the 24 (68%) respondents used Dropbox as a tool to organize personal data. Few respondents 5 (14%) used Google drive. Very few respondents 3 (8%) used Evernote and other tools such as GIF hub, Calibre to store and organize data.

Table 22
PIM tools

Tools	Frequency	Percentage
Dropbox	24	68
Google Drive	5	14
Evernote	3	8
Other Tools (GIF hub, CALIBRE)		

Cloud services

Table 13 presents the respondents' opinion about the reliability of cloud services. Cloud services i.e. Dropbox are used for online data storage. Results show that an overwhelming majority of the respondents 159 (83%) relied on cloud services for storage.

Table 13

Reliability of cloud services

Cloud services	Yes	No
Do you think that cloud services (such as Dropbox) are a reliable way of storing documents?	159 (83%)	32 (17%)

Use of Social Media for Information Storage

The respondents were asked about keeping personal data on social media in the questionnaire. Results show that the majority of 101 (51%) of the respondents did not use social media to keep personal data. However, the majority of the respondents 98 (50%) used social media for storage of informal digital data like pictures and videos, etc.

Table 14
Data store on social media

Save data on social network	Frequency
I do not use the social network to store data	101 (51%)
I use the social network only when the data or document, I want to preserve it is not an official or formal nature	98 (50%)

Information Fatigue

Information is overloaded if we do not delete the information which is not needed more. Table 15 shows that the majority of the respondents 121 (62%) deleted irrelevant and

obsolete documents. Most of the respondents 58 (30%) periodically deleted irrelevant data. However, there were only 17 (8 %) respondents who did not delete irrelevant documents.

Table 15
Irrelevant document

Delete obsolete documents	Yes	No	Periodically
Are you deleting documents that you find irrelevant and obsolete?	121 (62%)	17 (8%)	58 (30%)

Conclusion

The study aimed to investigate engineering and information technology students' personal digital information keeping and organizing practices. It also examined the attitude of students towards organizing and safekeeping their digital documents. Results of data analysis showed that the majority of male students participated in the study as compared to female. The majority of the students were from the engineering discipline as compared to information technology. An overwhelming majority of the undergraduate students participated in the survey as compared to graduate students.

The majority of the students considered that it is important to organize their personal digital documents. The majority of the students also attempted to organize their digital data on their personal computers through folder organization. Most of the students (40 %) accessed digital stored data according to their future needs. One-third of the students 62 (31 %) periodically checked their important digital data. Only 17 (8%) students regularly checked all the saved data. Most of the students 80 (40 %) indicated that they transferred only the most important digital documents. Many students 56 (28%) also attempted to transfer their digital data from older to a new medium. However, some students 30 (15 %) mentioned that it was not important to transfer the data from older to a new medium.

The majority of the students saved their data on personal computers to find them again. Many students used some tools i.e. Dropbox to save their data. Many students made a

couple of copies and saved their data on multiple devices. The majority of the students saved their digital data on their personal computers than all other methods of keeping and storing personal data. Followed by personal computers, students also made use of some tools such as Dropbox to store their personal data. Students were also asked about their keeping practices of online information (fun content downloaded from the Internet). Many students 50 (25%) did not keep online information; however, they accessed it through Internet according to their needs. About 41 (20%) students created bookmarks for future need of information. Some respondents 77 (38 %) back up their official documents only.

Findings of the study regarding students' organizing strategies show that the majority of the students organized their digital data into folders. Many students organized their personal data according to the relevancy of the content, by making separate folders of academic documents, official and entertainment content. Students who organized documents by folders were further asked about folder organization. Most of the students organized folders according to the relevancy of the documents i.e. by keeping official documents together and making separate folders of academic documents and fun content. The majority of the students used Dropbox as a tool to organize their data. Followed by Dropbox, few students stored their data on Google Drive. An overwhelming majority of the students favored that cloud services are a reliable way of storing information. The majority of the students did not use social media for storing personal data. However, they used social media for storing unofficial and informal data. The majority of the respondents deleted irrelevant and obsolete documents. Most of the respondents periodically deleted irrelevant data.

Present study findings imply that the majority of the students were aware of the importance of personal information organization and they also made effort to organize digital information into folders. Students were employing a variety of methods for keeping their digital data safe. These imply that students did not have one place for keeping all digital

information. Rather, their information items were being managed across different tools and locations. Most of the students were using personal information management tools i.e. Dropbox to save their data. However, the majority of the students were still not using PIM tools. It implies that there is a need for training programs for students related to the PIM management systems for effective digital information keeping, organizing, and finding.

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